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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,458	12/08/2004	Mark Thomas Johnson	NL 020502	1360

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P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

TRA, TUYEN Q

ART UNIT	PAPER NUMBER
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2873

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/517,458	JOHNSON ET AL.	
	Examiner	Art Unit	
	Tuyen Q. Tra	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 8 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Kishi et al. (US Patent 7,009,756 B2).

- a) With respect to claim 1, Kishi et al. discloses a display device in Figure 3 comprising of a pixel being provided with an one individually addressable pixel obstructing element (Figure 4, item 11), characterized in that a portion of at least one component (Figure 4, item 5), being one of an electrical or a mechanical component, is positioned beneath the obstructing element (item 11) in such a way that the portion is not visible for a viewer of the display device (column 4, line 59-67 – column 5, line 12).
- b) With respect to claim 2, Kishi et al. further discloses wherein the at least one component is a barrier (Figure 4, item 8).
- c) With respect to claim 5, Kishi et al. further discloses wherein the device is an electrophoretic display device.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kishi et al. (US Patent 7,009,756 B2), as applied to claim 1 above, in view of Ackley et al. (US 6,375,899).

Kishi et al. discloses a display device in Figure 3 comprising of a pixel being provided with an one individually addressable pixel obstructing element (Figure 4, item 11), characterized in that a portion of at least one component (Figure 4, item 5), being one of an electrical or a mechanical component, is positioned beneath the obstructing element (item 11) in such a way that the portion is not visible for a viewer of the display device (column 4, line 59-67 – column 5, line 12).

However, Kishi et al. does not teach a reservoir electrophoretic device. Within the same field of endeavor, Ackley et al. teach a reservoir electrophoretic device (item 18, Figure 1A).

It would have been obvious, therefore, at the time the invention was made to a person having skill in the art to construct the display device such as disclosed by Kishi et al., and with a reservoir electrophoretic display such as discloses by Ackley et al., for purpose of storing eletrophoretic fluid.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kishi et al. (US Patent 7,009,756 B2), as applied to claim 1 above, in view of Ukigaya (US 6,873,451).

Kishi et al. discloses a display device in Figure 3 comprising of a pixel being provided with an one individually addressable pixel obstructing element (Figure 4, item 11), characterized in that a portion of at least one component (Figure 4, item 5), being one of an electrical or a mechanical component, is positioned beneath the obstructing element (item 11) in such a way that the portion is not visible for a viewer of the display device (column 4, line 59-67 – column 5, line 12).

However, Kishi et al. do not teach a reflective element for enabling transfective operation. Within the same field of endeavor, Ukigaya discloses electrophoretic display device with teaching of a reflective layer (not shown) is preferably arranged on the first substrate (10) (col. 12, lines 10-13).

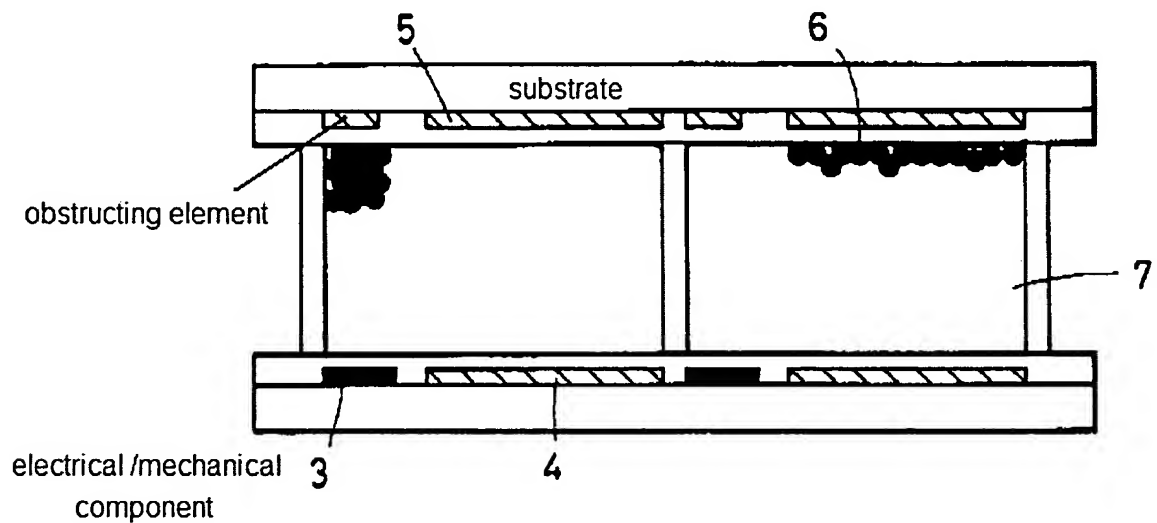
It would have been obvious, therefore, at the time the invention was made to a person having skill in the art to construct the display device such as disclosed by Kishi et al., and with a reflective such as discloses by Ukigaya, for purpose of reflecting light.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kishi et al. (US Patent 7,009,756 B2), as applied to claim 1 above, in view of Goden (US 6,738,039 B2).

Kishi et al. discloses a display device in Figure 3 comprising of a pixel being provided with an one individually addressable pixel obstructing element (Figure 4, item 11), characterized in that a portion of at least one component (Figure 4, item 5), being

one of an electrical or a mechanical component, is positioned beneath the obstructing element (item 11) in such a way that the portion is not visible for a viewer of the display device (column 4, line 59-67 – column 5, line 12).

However, Kishi et al. do not teach a reflective element for enabling transfective operation. Within the same field of endeavor, Goden discloses the obstructing element is arranged behind a front substrate (see picture below).



It would have been obvious, therefore, at the time the invention was made to a person having skill in the art to construct the display device such as disclosed by Kishi et al., and with the obstructing element is arranged behind a front substrate such as discloses by Goden, for purpose of reflecting light.

Allowable Subject Matter

8. Claims 7 and 8 are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter: (claim 7) one individually addressable pixel, said pixel being provided with an

obstructing element, characterized in that a portion of both a storage capacitor and a gate electrode is positioned beneath the obstructing element in such a way that the portion is not visible for a viewer of the display device; (claim 8) one individually addressable pixel, said pixel having a reservoir light shield, beneath which one or more of an electrode, a storage capacitor, a sensor, and a thin film transistor is positioned, said pixel further comprising a reflective element for enabling transfective operation, wherein at least a portion of a source electrode is positioned beneath the reflective element in such a way that the portion is not visible for a viewer of the display device.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Golden (US Patent 6,900,924 B2) discloses in Figure 1A an obstructing element (figure 1A, item 5) and an electrical/mechanical component (figure 1A, item 6).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyen Q. Tra whose telephone number is 571-272-2343. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky L. Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2873

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT

March 30, 2007


RICKY MACK
SUPERVISORY PATENT EXAMINER